Message

From: Tesler, Theodore [thtesler@pa.gov]
Sent: 4/22/2019 8:57:52 PM
To: Baker, Jordan [c-jorbaker@pa.gov]; Kasi, Veronica [vbkasi@pa.gov]; Trentacoste, Emily [trentacoste.emily@epa.gov]
Subject: RE: [External] Bion questions

These are nice responses Jordan. In question 2, I am wondering if Dominic is asking about the overall target setting process, (hockey sticks and "most effective" watersheds) but as I re-read, it looks like he is asking about attenuation only, which is a much easier answer.
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From: Baker, Jordan
Sent: Monday, April 22, 2019 1:07 PM
To: Kasi, Veronica <vbkasi@pa.gov>; Tesler, Theodore <thtesler@pa.gov>; Trentacoste, Emily <trentacoste.emily@epa.gov>
Subject: RE: [External] Bion questions

Nicki,

Please see my responses in red below:

1. How were nitrogen reductions to local waterways calculated? Were nitrogen reductions to groundwater sources part of this nitrogen reduction calculation? Were commercial nitrogen replacement factors used as part of this calculation?
   Nitrogen loads to local waterways are calculated using a suite of tools and calculations. The Bay Programs model uses datasets, GIS mapping and water quality monitoring to develop what is known as the Phase 6 Watershed Model. To understand the various data sets that feed the model please visit this link. Groundwater data does feed into the model and more information can be found here. Commercial nitrogen replacements were used in the model for both urban and agricultural calculations, for more information visit this link.

2. How was the percentage ratio for Bay nitrogen reductions from nitrogen reductions from local waters' arrived at? The ratio varies by county, so presumably a county-wide factor was utilized? For Lancaster County, 64% of the local water nitrogen reductions were determined to be Bay reductions.
   The attenuation process is calculated at the land river segment. Each land river segment will have a varying ratio of nutrients and sediment that reach the Bay. For more information and to see how attenuation factors vary please visit here.

3. With respect to recurring cost calculations – Table 5.6 (page 109) of the draft-final Phase 3 WIP outlines both first year and ongoing recurring costs associated with the 4 county pilot programs. Start-up costs for agriculture are listed at $221.4M, and recurring costs at listed at $97.5M. The way we understand it the $97.5M is a recurring cost to TMDL compliance BMP's and increases by $97.5M annually each year for 6 years thru 2025 as the BMP's are implemented assuming a straight line implementation program. Is this correct? If not, what are the estimated ongoing recurring costs associated with these BMP's. What happens at year 7? Does the recurring continue unabated going forward?
   The "Annual Recurring" numbers in Figure 5.6 in the WIP Draft are a sum of O&M costs and Opportunity costs annually. So that $97.5 million is needed to continue to upkeep all Ag BMPs proposed by the four pilot Counties. So that number would most likely not be fully realized until 2025, rather the Annual Recurring costs would be some number smaller assuming that not all planned practices will be implemented in the first year. The recurring costs would continue into year 7 (2026) and beyond as long as the practices are still needed to be reported to maintain compliance with the TMDL load reductions.

From: Kasi, Veronica
Sent: Friday, April 19, 2019 5:13 PM
To: Baker, Jordan <c-jorbaker@pa.gov>; Tesler, Theodore <thtesler@pa.gov>; Trentacoste, Emily <trentacoste.emily@epa.gov>
Subject: FW: [External] Bion questions

Ideas on how to respond to these questions welcome ..

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From: Dominic Bassani <dbassani@biontech.com>
Sent: Tuesday, April 16, 2019 4:04 PM
To: Kasi, Veronica <vbkasi@pa.gov>
Subject: [External] Bion questions

Vicky---see my questions below---please call with any questions---thx

1. How were nitrogen reductions to local waterways calculated? Were nitrogen reductions to groundwater sources part of this nitrogen reduction calculation? Were commercial nitrogen replacement factors used as part of this calculation?

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correct? If not, what are the estimated ongoing recurring costs associated with these BMP's. What happens at year 7? Does the recurring continue unabated going forward?

Dominic Bassani
Home
Cell
E-mail
Ex. 6 Personal Privacy (PP)